**Title:**
Enacting strategy through projects: an archetypal approach.

**Running Title:**
Projects as enacted strategy

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**Track 15: The Management of Projects: Reconciling Uncertainty and Responsibility**

## Abstract

Project management is increasingly regarded as a strategic competency because projects play an active part in defining an organization's relationship to its environment. It is now widely accepted that projects and programmes are at the centre of strategy implementation. However, the conditions and underlying assumptions of this dynamic relationship are still unclear. This paper aims to clarify the dynamics of the strategy process, by defining traditional approaches (corporate/business) and introducing three strategy core logics (archetypes). Building on this 'archetypology' the authors demonstrate how project management, through enactment and sense-making of strategy, enables organizations to face the challenge of complexity and uncertainty.

While recognizing that the "traditional" methods of analysis and management remain valid under certain conditions, this paper offers new avenues of reflection concerning the necessary contextualization of the project management approaches in order to ensure coherence between archetypes, enactment, learning and decision-making.

**Keywords:** Strategy; Project Management; Complexity; Enactment; Sensemaking

## Introduction

Project -based work is now clearly taken up by most organisations across industries (Packendorff 1995; Kreiner, 1995; Hodgson 2002; Jamieson & Morris, 2004; Bredillet, 2004c). Projects and programmes position a company in relation to its environment therefore directly becoming vectors or functional enactments of its strategy (Grundy, 1998). Through project management and other actions, strategic decisions are implemented and progressively become irreversible (Bredillet, 2004a; Weick & Bougon, 1986) in both project-based and functional organization ecosystems. Project management must deal with the characteristics of the whole environment, including aspects of: complexity (Arcade, 1998; Grundy, 2001), change and uncertainty (Voropajev, 1998; Winch, 2004), globalization, time, social aspects (Cooke Davies, 2004) and competitiveness (Hauc, 1998; Jugdev & Thomas, 2002). Projects, as strategic processes, modify the conditions of the firm in its environment because through them, resources and competencies are mobilized to create competitive advantage and other sources of value.

More recently, the modernist view of the environment controlling the organization has progressively led to the enactment argument (Weick, 1979) that sees individuals constructing their environment and then responding to their constructions. In this new frame of reference, emergent strategy evolves from activities taking place throughout the organization (Hatch, 1997). For other authors, through enactment, strategy becomes a powerful sensemaking device that allows people to act and thereby produce order out of the chaos of their experiences (Weick 1987; Huff, 1982; Gioia & Chittipeddi, 1991).

When people refer to strategic decisions they are concerned with all those issues that have significant and/or medium/long-term implications for the organisation. Strategic decisions serve the purpose of answering vital questions such as: what activities should the organisation

be involved in and how will it compete in its various business areas; they state the fundamental means by which the organisation seeks to achieve its goals; they are concerned with the future and they also have a purpose in relation to the internal world of the organisation and its people (Johnson & Scholes, 1997; Jennings, 1998).

These issues have been raised by numerous authors in reference to strategic issues such as the organization's competitive position, the benefits achieved through programmes and the effects of changes on the assumptions of programme business cases (Görög and Smith, 1999; Grundy, 2001; Lycett & al., 2004; Thiry, 2004b). However, the history of project management shows that these issues have traditionally been processed through a project level view of change control rather than a strategic view of change management (Lycett & al., 2004; Thiry, 2004a). Focus on definition and control of scope severely restricts flexibility of strategies, thus negating the value of having a portfolio of projects or a programme. Furthermore, insistence on a rigid form of programme life cycle intrinsically limits the ability of the programme to adapt in response to evolving business strategy (Lycett & al., 2004).

Recently, a number of authors have focused on the strategic aspect of projects and programmes. Wijnen & Kor (2000) write that a programme strives for the achievement of a number of, sometimes conflicting, aims and has a broader corporate goal than projects. Görög and Smith (1999), argue that strategic management is based on continuous re-formulation and is a form of ongoing adjustment, whereas projects concentrate on achieving one single particular result within set time and cost constraints. Partington (2000) argues that programmes require integration across strategic levels, controlled flexibility, team-based structures and especially, an organisational learning perspective, which is able to accept paradox and uncertainty. Murray-Webster and Thiry (2000) advocate a vision of interdependent projects and actions which includes mechanisms to identify and manage emergent change. Still, more recently, Lycett et al. (2003), Jafaari et al. (2004), Morris

(2004) and Thiry (2004b) have advocated programme management as a strategic benefit delivery process.

In this paper, the authors advocate that a configuration perspective is needed to capture different kinds of project/programme governance approaches. The basic assumption being that different situations involve different environments and different characteristics and that project management governance cannot be taken out of context. Understanding these situations and contexts, and adapting decision-making and learning systems accordingly, is crucial. The underlying assumptions that have guided the development of corporate strategy are presented under the three umbrella titles of “capability”, “guerrilla” and “complexity” core concepts (Lengnick-Hall & Wolff, 1999). The theory of complexity and its core concept of emergence are used to support the more recent enactment theory of strategy.

## Strategy: A Link between the Organization and its environment

Strategy has been defined as a means (function) of linkage between an organization and its environment (Ansoff, 1975). In the operational mode, this means that strategy should optimize the organization’s performance at penetrating its environment as well as optimize its own internal performance. On the other hand, in the entrepreneurial mode strategy should look at opportunities of expansion-diversification-reconfiguration, choosing the most effective function, and then select its organizational structure accordingly.

An ecosystem is defined as *"the complex of a community of organisms and its environment (biotope) functioning as an ecological unit"* (Merriam-Webster, 2000). In this case, the biotope is the environment including the context sub-system. This biotope is defined, according to pertinent criteria, by decision makers and/or project managers. Of course, the environment and context exist only in their dialectical relationship with an organization, operation and project (Bredillet, 2004b). In this context, businesses are always subjected to

either external or internal pressures that force them to change, adapt or compete. Responses to these pressures generate ideas, threats or opportunities, more broadly labelled as *business strategies* (Porter, 2004 [1985]). Business strategies are often *emergent*, in the sense that they are not planned in advance, but respond to a given change in the business environment. Consequently, Porter (2004 [1985]) distinguishes two main types of strategies: the "*Corporate Strategy*" – the overall long-term firm strategy – and the "*Business Strategy*" – in response to specific business unit decisions. We will examine how they relate to projects, programmes and portfolios.

***Corporate and Business Strategies***

**Corporate Strategy** addresses the composition of a firm's portfolio of business units (Porter, 2004 [1985]). It is a top down *deliberate* (planned) type of strategy that is relevant in stable environments (Mintzberg & Waters, 1985; Mintzberg et al., 1998, Hatch, 1997). Porter (2004 [1985]) also adds that: *"Corporate strategy has become increasingly viewed as portfolio management"*. In fact portfolio management is intrinsically linked to corporate strategy since it is a stable, long-term approach that ensures that all the projects of the business are prioritized in regards of a yearly budget and the corporate strategy, defined by a firm's values, as well as its strengths and weaknesses. It is mainly aimed at increasing the efficiency of resources in the organization and sustaining it.

Corporate strategies are traditionally at the core of an organization's vision; they are medium or long-term forecasts of the organization's future position. As such, they are fairly stable and not influenced much by context changes, except if these are of great magnitude. Their implementation is usually a top-down process and concerns the high level direction of the corporation. Typically, large organizations engage in both corporate and business level strategy, where business strategies are formulated at business unit level and coordinated at

corporate level; small organizations, on the other hand usually have business level strategies as they are more affected by the environment (Hatch, 1997).

Already, in 1985, Porter identified the fact that a vertical strategy fails to create the synergy necessary to achieve competitive advantage. He suggests that *horizontal strategy*, "a coordinated set of goals and policies across distinct but interrelated business units" (p.318), could identify and exploit the interrelationships that are missing in portfolio management.

In contrast, **Business Strategy**, charts the course of a firm's activities in individual industries (Porter, 2004 [1985]); it is an adaptive, bottom-up process (Hatch, 1997). There are two ways to develop business strategies:

- each unit competes with each other for the same resources, which, alas, is the case in most organizations—a vertical strategy—or;
- strong and meaningful *interrelationships* are created between units—a horizontal strategy.

In a horizontal relationship, business units, because they are close to the action, will best be able to deal with turbulent environments by developing what Mintzberg & Waters (1985) call *emergent strategies*.

Because business unit strategies are responsive and focused on the resolution of specific business needs, programme management will often be used to implement them. In this context, programme management can be seen as a *Decision Management Process* (Thiry, 2004b) where expected business benefits are identified through a sensemaking and learning process, the output of which constitutes criteria that will be responsible for success: the *Critical Success Factors*.

***Deliberate and Emergent Strategies***

Further these *corporate* and *business* categories of strategy, Mintzberg & Waters (1985), have defined two types of strategies: the *intended* strategy—leadership plans and intentions—and the *realized* strategy—what the organization actually did. They further define '*deliberate*' strategies—realized as intended— and '*emergent*' strategies—realized in the absence of intentions. The first is typically based on precise intentions, shared by all stakeholders; the second is largely responsive, developing patterns of action in response to environmental pressures. These definitions describe 'pure' strategies but research has suggested that organizational strategies rather fit somewhere on a continuum between the two (Mintzberg et al., 1998).

In the context of this paper, *deliberate strategies* will be associated with intended strategies realised in a stable environment; and *emergent strategies* will be linked to responsive adjustments to turbulent environments at the business level.

## Archetypes: The core logics of strategy

Beyond category and type, it is important to explore the logical foundations of prominent streams of strategic management. Analysis reveals some concordant assertions, some similarities across pairs of frameworks, and some fundamental contradictions among the various logic sets. Since key elements in the fundamental premises of each research stream present logical contradictions with each of the other two, a strategy derived from an integration of these perspectives creates inconsistencies in a firm's enacted context, its assumptions about strategy making, and its administrative arrangements. As circumstances change, a firm may be required to undergo a 'core logic shift' to maintain consistency between its strategy and its strategic context. When a shift becomes necessary, a firm needs to

overcome structural inertia, competitive inertia, organizational momentum, and its current management logic to maintain internal consistency.

A persistent challenge in the field of strategic management is deciding what theoretical tool to use to describe or predict strategic circumstances, actions, and consequences. As Rumelt (1979) explained, the kinds of situations that call for strategic thinking and analysis are those that are ill structured and thereby difficult and ambiguous. Rumelt offered four tests to identify effective strategy theories.

1. The goal consistency test requires a theory to specify primary goals and to avoid inherently conflicting objectives.
2. The frame test requires a theory to distinguish important from unimportant factors and to define critical subproblems that must be resolved.
3. The competence test requires a theory to offer ways to use organizational skills, resources, and competencies to resolve critical issues.
4. The workability test requires a theory to provide a reasonable expectation that desired results can be achieved if the theory is applied appropriately.

Here, the term core logic is used to describe the composite principles and premises of a strategy theory that respond directly to these four tests. Conceptually 'core logic' is a generic term like 'hypothesis.' Just as alternate hypotheses can be considered, the core logic underlying a specific strategy can be compared with the distinct core logics of alternate perspectives to identify similarities and differences in root assumptions. In other words, core logic is a set of articulated principles that specify strategic goals, frames, competencies, and expectations for success.

Premises comprising core logic describe the factors and relationships that explain the expected consequences of a firm's strategic choices and actions. Core logic articulates the

sequential foundation for structuring unstructured strategic problems. It is applied within an enacted context in which firms create many of the external conditions they face (Weick, 1995). Rumelt's criteria enable a systematic examination of core logic utility as well as specific content elements. The conceptual architects of at least three research streams (i.e., resource-based strategies, hypercompetition/high-velocity strategies, and ecosystem/chaos theories) have articulated the core logic of their ideas with sufficient consistency and explicitness that these theories unmistakably meet Rumelt's tests.

**Three logics for three approaches to strategy**

Core logics are described as separate sets of premises since the initiators of each of these perspectives argue that the conceptual foundation of their approach is unique. For reader comprehension, each logical trend has been labelled to reflect the central language and ideas presented by their respective leaders as suggested by Lengnick-Hall & Wolff (1999). Resource-based views of the firm are presented under the general *"capability logic"* label. Hypercompetitive and high-velocity perspectives are presented under the *"guerrilla logic"* label and ecosystem and chaos theory-based views appear under the *"complexity logic"* heading.

**Capability logic**

Capability logic reflects the general premise that one firm will outperform another if it has a superior ability to develop, use, and protect elemental, platform competencies and resources (Lengnick-Hall & Wolff, 1999). Barney (1991, 1995), for example, views a firm as a blend of resources that enable certain capabilities, options, and accomplishments. Prahalad and Hamel (1990) depict core competencies as the foundation for creating the future. The emphasis is on internal capabilities that enable a firm to create and exploit external opportunities and develop sustained advantages when used with insight and adroitness.

**Guerrilla logic**

A second core logic is captured via the concept of hypercompetition and high-velocity firms (Lengnick-Hall & Wolff, 1999). Guerrilla logic contends that one firm will outperform another if it is more adept at rapidly and repeatedly disrupting the current situation to create an unprecedented and unconventional basis for competing (D'Aveni, 1994; Collis,1994; Chakravarthy, 1997). Hypercompetition requires an unending stream of discontinuously redefined competitive advantages (e.g., shifting from checkers to basketball to poker) and radical changes in market relationships (e.g., from competitors to allies to targets). Unlike resource-based views, highvelocity thinking is not built upon existing strengths, but instead repeatedly disrupts current conditions, including a firm's own established position, to reshape relationships and realities (Eisenhardt, 1989; Iansiti, 1995; Tapscott,1996; D'Aveni, 1995). This enables a firm to repeatedly form new, albeit temporary, competitive advantages based on different rules and different asset combinations than the existing pattern.-Hypercompetitive strategies intentionally undermine current advantages and drastically alter market contexts to give added punch to diverse courses towards competitiveness. These strategies hopscotch conventional boundaries and perspectives to repeatedly redefine the competitive arena. The more avenues there are for competitive advantage taking, the more unpredictable a firm's strategic actions become.

**Complexity logic**

An emerging focus in strategic thinking is derived from research on business ecosystems and chaos theory. These perspectives argue that strategic success is a function of a firm's talent for thriving in dynamic nonlinear systems that rely on network feedback and emergent relationships (Lengnick-Hall & Wolff, 1999). Effective strategies therefore require a blend of competition and cooperation. Paradoxical relationships, positive and negative feedback, and

dynamic tension embedded between various actors and processes, as well as between a firm and its context, are fundamental elements of complexity logic. Strategy is reconceptualized to mean the design of processes that create attractors, facilitate desirable flows, foster synergy, integrate subsystems, capitalize on community, and simultaneously eliminate errors and reduce entropy. Traditional notions of competitive advantage do not carry much weight in complexity logic. The business applications of complexity logic such as learning organizations (Senge, 1990) and ecology (Boeker, 1991) are more familiar to many managers than the underlying conceptual roots of complexity theory and ecosystems. Recent work by Stacey (1995), Levy (1994), McDaniel (1997), Tetenbaum (1998), Sherman & Schultz's (1998), Lewin & Regine (1999), Kurtz & Snowden (2003) and Bredillet (2004a) is making the conceptual link more visible in the strategic field. These authors explain how complex systems are inherently unpredictable and fundamentally unknowable and highlight the implications of nonlinear relationships and coexisting paradoxical forces. Complexity logic means replacing formal, hierarchical structures with self-organization, magnifying rather than obscuring individual differences, and focusing on relationships, community, patterns, and relativism.

**Archetypes and project management: Facing the challenge of complexity and uncertainty**

Issues pertaining to core logic have been paralleled in the project and programme management literature of the last decade, although mostly with no real considerations to a pertinent epistemological approach (Bredillet, 2004a). A look at project management classification (Shenhar et al., 2002; Turner, 2000; Crawford et al., 2002; 2004) reflects the same trends as detected for core logics of organisational strategy (Crawford et al., 2002; NASA, 2004). Although classifications tend to be slightly different, there is consistency in

the two ends of the spectrum; on one end, we find what Turner (2000) calls "well-defined" projects and on the other end, we find what Declerck et al. (1997) have called "complex" projects or programmes. This categorisation is consistent with NASA (2004), PMCC (2002), APM, (2000) and others.

Organizations, depending on the kind of core logic they are embracing, face:

> *"the combined challenge of unforeseeable uncertainty (the inability to recognize the relevant influence variables and their functional relationships; thus, events and actions cannot be planned ahead of time) and high complexity (large number of variables and interactions; this leads to difficulty in assessing optimal actions beforehand)"* (Sommer & Loch, 2004).

This leads organizations to adapt and adopt the appropriate project and programme management methods in order to implement their strategy.

This is coherent with the current phenomenon in the PM literature and practice as well as with general organizational theories that address, more particularly, the two following overlapping areas of interest:

- The **environment and management of organizations**, which includes issues of complexity, organizational change and corporate governance;
- The **management of change**, which includes strategy, learning, sensemaking and decision-making.

All these areas have developed theories that, in different ways address the difference between stable predictable environments and complex, changing and uncertain environments. Bolman & Deal (2003, p.16) identify numerous studies demonstrating a correlation between the ability to use multiple frames and the efficiency of managers and leaders, however, most of the theories have taken a very specialised and narrow focus and there is consequently very

little cross-fertilisation between theoretical areas or fields (Lewin had already identified these issues in 1939). One of the goals of this paper is to attempt to bridge this "specialisation" gap and view projects as powerful strategy implementation tools, strategy definition drivers and strategy as a generic function linking the organization to its environment.

Many authors from both the organizational management and project management fields (Chaize, 1992; D'Herbemont & César, 1998; Mintzberg, 1979; Porter, 2004 [1985]; Pinto & Rouhiainen, 2001) have insisted on a view of the organisation that is flexible, dynamic and integrated both horizontally and vertically. This view is compatible with the concepts of enactment and sense-making as strategic tools: *"flexible organizations, adaptable to change […] sensitive and responsive to the environment, concerned with stakeholders […] organizations characterized by internal and external relationships"*. (Kanter, Stein & Jick, 1992)

Furthermore, "the proliferation of complex organizations has made most human activities collective endeavors" (Bolman & Deal, 2003, p. 5) that require constant realignment. In order to address this issue, Bolman and Deal (2003) suggest reframing organizations, an approach which allows leaders, strategists and managers to use a series of frames that enable them to help the organization shift perspectives when needed. They argue, like others (Hatch, 1997), that a number of authors and researchers have demonstrated that "the ability to use multiple frames is associated with greater effectiveness for managers and leaders" (Bolman & Deal, 2003, pp. 15-16). This is a view shared by organizational researchers like Mintzberg (1979) and Isenberg (1984), as well as by project management writers like Grundy (2001) and Duggal (2001) who consider management in complex environments as both an art and craft.

## Transcending the Archetypes: Projects as enactors and sensemakers

Mintzberg et al. (1998) have demonstrated that in complex and rapidly changing environments decision makers cannot use a rational model anymore; they have also clearly linked emergent strategy with a learning process. In these situations, sensemaking is 'a precondition of decision strategies' (Weick, 1995).

As projects become more and more complex and organizations are confronted with the need for more environment-sensitive results, project and programme management could be an effective enactment and sensemaking device for stakeholders to correlate results with strategic intent, transcending the nature of the strategic archetypes. Many authors, from both the strategic and the project perspectives (Hatch, 1997; Mintzberg & Waters, 1985; Pellegrinelli, Partington & Young, 2003; Thomas et al., 2000, Sahlin-Anderson and Söderholm, 2002), have identified this possibility, outlining its current limitations, attributable to the gap between strategic development and strategy implementation. Perhaps the first formal statement concerning the role of the project manager as fulfilling this linkage role was Gaddis' (1959) characterization of the project manager as the "man in between" the demands of technologists and the demands of senior management and, as such, responsible for delivering the required asset to the agreed schedule, budget, and specification. This view has recently been reemphasized by a number of authors (Frame, 2002; Thomas et al., 2000; Kendall, 2001) who have advocated the evolution of the role of project manager toward a more business-focused "function," or a stronger focus on business benefits for projects (Cooke-Davies, 2002; Morris, 1997).

This situation is yet more evident in a multi-project (or programme scenario) and in complex environments. Complexity theory as a core logic for strategy has yet to influence mainstream theory and practice in management (Kurtz & Snowden, 2003) although it offers potential to

explain emergent trends such as the concept of enactment. Currently, most organizational theorists associate organizational complexity to *multiple perspective approaches* (Burrell & Morgan, 1979; Martin, 1992) or "*the number and diversity of the elements in an environment"* (Hatch, 1997, p.89). Long-term organizational environments are inherently complex due to the multiplicity of "agents" and their interactions; sadly, organizations rely on systems and technologies that collect and process information or try to break it up into small short-term pieces to make it more manageable. Although these methods may be helpful, they are far from sufficient (Bolman & Deal, 2003) and promote a vertical and controlling view of the organization. Porter, in 1985 had already identified the lack of horizontal interrelationships as a key problem in strategic applications. Complexity does not exclude interlacing multiple approaches and embraces other core logics to respond to environmental demands.

Further, ambiguity and uncertainty are two recognised 'unstable' contexts taken into account by complexity that is seen as positively enhancing the collective sense-making experience rather than complicating it beyond the positivists' scope of comprehension. 'Sensemaking occasions' are specifically associated with *ambiguity* and *uncertainty* (Weick, 1995) and the intensity and 'positiveness' of the sensemaking reaction to either will vary, according to certain factors. Guba & Lincoln (1989) identify four conditions that will result in the challenge of a construction:

a) *Stability*, where 'new information is introduced that is consistent with the existing construction' and therefore triggers an incremental process comparable to expanding our knowledge;

b) *Information disjunction*, where information is introduced that is inconsistent with the existing construction, but merely requires adjustment or 'correction' of the construction;

c) *Sophistication disjunction*, where the new information is consistent with the construction, but requires a higher level of sophistication to integrate it, this may mean the structural reconsideration of the construction, but does not affect the basic beliefs;

d) *Information and sophistication disjunction*, which is a combination of b) and c) and will require a paradigm shift which might confuse and conceptually immobilise the actors and create a strong resistance to the needed change.

Each of these conditions will result in a different level of ambiguity, caused by the disjunction between the existing state and the possible state affecting the motivation and, therefore, the sensemaking process and its management towards a positive outcome. The deeper the disjunction between the existing situation and the outcome situation, the lower the motivation, the higher the need for the sensemaking process to be managed.

Uncertainty-reduction through planning, as in the traditional project management framework, provides discipline and a concrete set of activities, as well as contingencies that can be codified, communicated, and monitored in a relatively predictable context. However, in unpredictable contexts, ambiguity-reduction, or contextualization, must come first to facilitate sense-making that can later lead to a constructive decision-making process (Weick, 1995; Thiry, 2002; Kurtz & Snowden, 2003).

Weick (1995) suggests that 'sensemaking is partially under the control of expectations'; it is 'an interpretive process', which is 'grounded both in individual and social activity'. Another important concept is that, in a sensemaking perspective, individuals create a view of the ideal situation—a goal—at the beginning of any decision or evaluation process, using available cues. Projects as the previously defined units of "*business strategy*", because they are close to the action, will best develop this shared stakeholder view of the ideal situation-goal-using available cues of turbulent environments and elaborate what Mintzberg & Waters (1985) call

*emergent strategies*. A number of authors (Smith, 1988; Carver & Scheier, 1990; Csikszentmihalyi, 1992) have also demonstrated that a positive response to a change situation is directly related to the perception of the 'achievability' of a goal and the challenge that is associated with its fulfilment.

Project management governance is understood here as the project management system that enables acting and that answer the demands of a wide range of stakeholders. Consequently, governance is based on two criteria: accountability and performance. *Accountability* is promoted through transparency and *performance* is promoted by responsive and responsible decision-making. Decision-making in turn is a secondary by product of the stakeholders' collective sense-making process.

## Acting, Learning and Deciding: a necessary contextualization

Project management provides a privileged place for individuals, project managers and stakeholders to act and learn. Having in mind the need for efficiency and effectiveness, a project team acts as a temporary dissipative structure (Declerck, R., Debourse, & Declerck, J., 1997, p. 207), generating first entropy (that is knowledge) creating knowledge with many degrees of freedom and then, applying it in the former stage of a project.

> *"Acting man is always concerned with both "material" and "ideal" things. He chooses between alternatives. …Choosing determines all human decisions."* (Von Mises, 1981)

An immediate consequence is that project managements' generic theories, concepts, methods and tools constitute a specific framework enabling the contextualisation of their use in the project ecosystem. Furthermore, they provide a framework that enables their contextualisation within the specific dynamics of a project trajectory, composed of its life-cycle processes. The latter are the transient tools of the product-enactment-strategy cycle. To act on, and to learn

about anything requires a representation or concept of it (a mental model); the strategy should elaborate the “swiftest and surest” mental guidelines towards this representation.

It is within the core context of the theory of complexity that the negative effects of long-term forecasting, that influences corporate strategy, is better highlighted as a futile exercise. Within this framework, attention is given to short-term forecasting such as in emergent “*business strategy*” and short-term decisions, where the theory of chaos suggests that there may be a chance of ‘getting it right'. Similarly to the knowledge generated through projects, chaos theory has led to developments which provide new insights and techniques progressively refining the quality of short-term forecasts.

These lessons from the theory of chaos and complexity are readily transferable to the project and programme environments in that projects meet the need of creating temporary structures and systems and offer the ability to focus on short-term rather than long-term decision-making. On the other hand, programme managers confronted with the compounding effects of several projects in a longer time frame are still at loss looking for order within chaos and translating results into business strategies that, in turn, influence corporate strategy through enactment patterns.

Moreover, it could be for lack of such communication that the impressionistic theory of decision-making (Brunsson, 2000) has gained credibility over the last few years. Brunsson (2000) outlines the fact that we do not have empirical evidence confirming a close relationship between decision-making and choice of action, a necessary condition for coherence in a rationalistic approach to decision-making, more particularly so at strategic levels.

A recent research project of 126 project manager interviews in 32 companies to understand decision-making at project portfolio management level concluded that the rationalistic model

is better suited to situations in which uncertainty about consequences is low and in which it is possible to estimate more accurately bottom-line effects of successful completion (Eskerod & al., 2004). These findings are coherent with Brunsson's suggestion that the impressionistic perspective is of value mainly in complex decisions involving high levels of coordination of action and for which consequences are long-term and far reaching, thus, involving high levels of uncertainty.

## Conclusion

If one considers the greater framework of complexity and the powerful articulation of the enactment theory through sensemaking, a much stronger link appears within the action-consequence-output-decision-action cycle and its effect on business, corporate decisions and strategy. Additionally:

- Rather than having projects compete with each other for resources, strong and meaningful *interrelationships* can be created between projects.
- The core logics of strategy articulate the sequential foundation for structuring messy problems and are applied within an enacted context in which, *through their projects*, firms can recreate many of the external conditions they face.
- Project strategies become responsive and focused on the resolution of specific business needs. In this context, project and programme management could be seen as a *Decision Management Process* where expected business benefits are identified through a sensemaking and learning process that contributes to emergent business strategy.
- '*Emergent*' strategies (Complexity logic)—realized in the absence of intentions become largely responsive, developing patterns of action in response to environmental pressures and to the completion of projects in this environment.

- In this context, specific projects are best understood through “Capability logic”, reflecting the general premise that one will outperform another if it has a superior ability to develop, use, and protect elemental platform competencies and resources.
- Other projects will use “Guerrilla logic” and contend that one will outperform another if it is more adept at rapidly and repeatedly disrupting the current situation to create an unprecedented and unconventional basis for competing.

Given the previous statements, strategic success seems best described as a function of a firm's talent for thriving in dynamic nonlinear systems and its ability to rely on network feedback and emergent relationships through projects. In a rapidly changing world and an information-based society, practitioners and organizations increasingly need to respond judiciously to unknown situations and to go beyond established knowledge to create unique interpretations and outcomes (Schön, 1971; Toffler, 1990; Reich, 1991).

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